

**SAN FRANCISCO BAY AREA  
TRANSIT-ORIENTED DEVELOPMENT STUDY**



**TASK 5  
PRELIMINARY REGIONAL POLICIES AND INCENTIVES TO ENCOURAGE  
TRANSIT-ORIENTED DEVELOPMENT**

April 2005



**METROPOLITAN  
TRANSPORTATION  
COMMISSION**

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# **PRELIMINARY REGIONAL POLICIES AND INCENTIVES TO ENCOURAGE TRANSIT-ORIENTED DEVELOPMENT**

## **I. PURPOSE**

MTC is developing a set of policies to improve the integration of transportation and land use in the Bay Area – and a more specific policy to condition the allocation of regional discretionary transit funds under MTC’s control, provided by Resolution 3434, on supportive land use plans and policies by local jurisdictions. The intent of this Transit-Oriented Development (TOD) policy is to create a better linkage between transit planning and land use planning, and encourage transportation agencies, local jurisdictions, and the private sector to work together to create development patterns linked with investments in transit, which in turn build a broader set of transportation and housing options within the Bay Area. The purpose of this paper is to define the focus, performance measures and policy options associated with the implementation of the regional TOD policy.

## **II. BACKGROUND**

In December 2003, the Metropolitan Transportation Commission adopted a five-point Transportation and Land Use Policy Platform as part of Phase One of the Transportation 2030 Plan. This policy established MTC’s overall approach to improving the integration of transportation and land use in the Bay Area. The Platform builds upon MTC’s Transportation for Livable Communities (TLC) and Housing Incentive (HIP) programs, and also serves to provide policy support for the Regional Agencies’ Smart Growth Vision. One of the key Platform points is to condition the allocation of regional discretionary transit funds under MTC’s control, provided by Resolution 3434, on supportive land use plans by local jurisdictions.

MTC’s Resolution 3434 provides a funding commitment to nearly two dozen new transit expansion projects in the nine-county San Francisco Bay Area. Some of these projects are planned for newly growing areas and others are intended to improve service in the urban portions of the region. These projects encompass a wide range of transit technologies (BART, light rail, ferry, commuter rail, streetcar, and bus rapid transit) and will support a diverse range of places (urban downtowns, suburban centers, residential neighborhoods, and park-and-ride stops). MTC’s policy direction to condition the allocation of regional discretionary transit funds on supportive land use measures will not override local land use authority or require a uniform approach to development near transit. Rather, the overall goal is to ensure a mutually supportive relationship between development patterns and the transit services that support it.

Linking transportation and land use is not new, nor unique, to the Bay Area – it is widely understood that land use can have a profound impact on the cost-effectiveness of transit investments. A number of different policy approaches and incentive programs for TODs

from other parts of the country have been reviewed to help define effective approaches for the Bay Area (see Task 2: Review of Existing Transit Oriented Development Studies and Policies.) The Federal Transit Administration (FTA) and the Bay Area Rapid Transit District (BART) have policies that condition the funding of transit projects on land use conditions and policies, while other regions also have policies that support TODs.

Numerous studies have established linkages between the density, mix, pattern and design of local land uses and transit ridership. These studies show that there is a correlation between the density of development, the frequency of transit service, the types of supporting commercial uses and services, the size and length of blocks, the interconnectivity of streets, parking policies, and the design of buildings within walking distance of a transit station, with the degree to which residents and employees use transit. Mixed-use places that facilitate some daily trips by foot or bike are good complements to transit. These transit-oriented developments (TODs), if designed properly, can provide a sustainable base of ridership in addition to those transit patrons generated from surrounding areas and arriving at stations via car or feeder bus.

Jeffrey Zupan and Boris Pushkarev's *Public Transportation and Land Use Policy* established early and significant empirical evidence linking land use patterns with public transit patronage. Published in 1977, their study examined the relationship between transit use, density, and urban design. They found that automobile use declines and transit use rises as a function of residential densities around transit stops and the degree to which these transit lines link to major job centers. Their work, which was conducted in the Tri-State region of New York City, New Jersey and Connecticut, resulted in useful quantitative guidelines that have been relied upon by transit planners ever since.<sup>1</sup> Larry Frank and Gary Pivo's findings in 1994 supported the standards promulgated by Zupan and Pushkarev.<sup>2</sup> And Robert Cervero and Reid Ewing in 2001 found that transit ridership and vehicle miles traveled were both related to densities of residents and employees.<sup>3</sup> More recently, a body of research supported by the Transportation Research Board of the National Academy of Sciences has found that transit ridership increases as a function of residential density, transit accessibility and land use mix.<sup>4</sup> Hank Dittmar and Shelley Poticha have proposed a categorization of place types with associated transit service levels, and land use densities and mixes in the recent book *The New Transit Town: Best Practices in Transit-Oriented Development*, that can be used to conceptualize the match between different types of land use patterns and different types of transit.<sup>5</sup>

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<sup>1</sup> Jeffrey Zupan and Boris Pushkarev, *Public Transportation and Land Use Policy*, (Bloomington: Indiana University Press), 1977.

<sup>2</sup> L.D. Frank and G. Pivo, "Impacts of Mixed Use and Density on Utilization of Three Modes of Travel", *Transportation Research Record*, 1466, 44-52.

<sup>3</sup> Ewing, Reid and Robert Cervero. 2001. Travel and the Built Environment: A Synthesis, *Transportation Research Record*, No. 1780, pp. 87-114

<sup>4</sup> Cervero, Robert, and Samuel Seskin, An Evaluation of the Relationships Between Transit and Urban Form, Transit Cooperative Research Program, 1995; and J. Richard Kuzmyak, Richard Pratt and G. Bruce Douglas, *Land Use and Site Design: Traveler Response to System Changes*, Transit Cooperative Research Program, 2003.

<sup>5</sup> Hank Dittmar and Shelley Poticha, in Dittmar and Ohland, editors, *The New Transit Town: Best Practices in Transit-Oriented Development*, Island Press, 2004, pp. 34-38.

It is important to recognize that state and regional agencies, public transit agencies, county congestion management agencies and local governments are all on the same side of the TOD policy challenge. Our review of successes in other regions showed that the best achievements were made when all the public and private stakeholders cooperated and coordinated in laying the groundwork for TOD through good planning, public outreach, the development of appropriate zoning and specific plans, infrastructure financing, and the reduction of other regulatory barriers that might otherwise stand in the way of TOD.

MTC has an interest in linking land use and transit for several key reasons:

- Maximizing transit ridership from patrons who live and work in close proximity to transit stations allows the provision of more cost effective transit services, by avoiding the costs of new parking facilities, additional road space and facilities, and the operating costs of feeder buses;
- Sustaining existing transit riders and attracting new ones is often easiest when transfers between transit systems are minimized and destinations on the final end of the transit trip are within an easy walk;
- More people living and working within an easy walk of the transit station means fewer automobile cold starts and better air quality; and
- Implementation of the Smart Growth Vision, as endorsed by the MTC along with the other major regional agencies.

### **III. EXISTING MTC POLICY**

#### **A. MTC'S RESOLUTION 3434**

MTC adopted Resolution 3434 in 2001, which established a regional commitment to a \$10.5 billion Regional Transit Expansion Program of identified, high-priority projects providing 140 miles of rail and 600 miles of new express bus routes. These projects were evaluated based on a number of performance criteria, including land use. The criteria was intended to:

*“Evaluate potential system benefits accrued as a result of adjacent land uses along rail/bus corridors, based on residential and employment land use densities around planned stations or transit corridors...”*

The chart below depicts the population and employment performance measures of Resolution 3434:

<b>EXISTING LAND USE PERFORMANCE MEASURES: RESOLUTION 3434</b>		
Rating	Residential Population Per Square Mile	Employment Per Square Mile
High	20,000 and above	50,000 and above
Medium	10,000 – 20,000	20,000 – 50,000
Low	Less than 10,000	Less than 20,000

This performance measure is one of many criteria used to evaluate each Resolution 3434 project. It was not assigned any specific weighting as a performance measure, and no consequences were defined for projects that were rated a "low" on the population and employment density scale. In addition, all projects were rated on the same scale regardless of mode – i.e., whether a BART extension, a new ferry terminal or a bus rapid transit project.

#### **B. MTC'S TRANSPORTATION AND LAND USE POLICY PLATFORM**

In December 2003, the Commission adopted a five-point Transportation and Land-Use Policy Platform, which established a stronger linkage between transportation and land use planning in the Bay Area. As a key element of the platform, the Commission took a further step to condition the award of regional discretionary transit funding on supportive local land use plans and policies. The policy states that the Commission will:

- *Encourage changes to local general plans that support Transit Oriented Development for Resolution 3434 investments.*
- *Promote development of land uses adjacent to major transit extensions, to support ridership markets that will make these investments economically feasible.*
- *Condition the award of regional discretionary funds under MTC's control for Resolution 3434 expansion projects, on the demonstration by local government that plans are in place supporting some level of increased housing/employment/mixed use density around transit stations.*

This paper defines how the above policy to condition transit funding on supportive land use could work. Once complete, the policy will focus on:

1. Developing a more detailed set of land use performance measures for evaluating transit projects under Resolution 3434;
2. Proposing an implementation process that establishes expectations, timelines, roles and responsibilities for all parties involved in implementing the transit projects and making the land use decisions; and

3. Providing technical and financial support for local governments and transit agencies attempting to promote transit-oriented development along corridors identified in Resolution 3434.

These items, which will be incorporated into an amendment to Resolution 3434 in Spring 2005, will subsequently be referred to in this paper as the "regional TOD policy."

#### **IV. TOD POLICY PRINCIPLES**

The following principles will be used to guide development of the regional TOD policy:

Increase Transit Ridership By Encouraging Development Around Transit. One of the key goals of the TOD policy is to increase the potential for transit ridership by providing more opportunities for people to live, study, and work in close proximity to key transit lines – both stations and corridors. The TOD policy will refine MTC's targets for supportive land use to maximize potential ridership for new public transit investments funded under Resolution 3434.<sup>6</sup>

Ensure that Transit Villages are Livable and Vibrant Places. While generating transit ridership is a critical goal for any transit-oriented development policies MTC adopts, compact development patterns and higher density residential and commercial growth around transit will not come at the expense of livable communities, green spaces and other key quality of life features.

Develop Criteria That Are Tailored to Fit Regional Variations. A key concept in defining "supportive land use policies" is to match the land use density and mix of uses to the specific transit modes (i.e., BART, light rail, ferry, commuter rail, streetcar, and bus rapid transit). In addition, policies must take into account the geographic diversity of the region and the variations in urban and suburban settings.

Develop Thresholds for Corridors to allow Variations at Stations. No two transit corridors or stations are alike. While the TOD policy may establish certain thresholds for an entire corridor, it will leave the distribution of land uses along those corridors up to local governments.

Develop Thresholds that Recognize Future Planning as well as Existing Conditions. The TOD policies will assess both current conditions and local commitments to engage in a process of planning for TOD.

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<sup>6</sup> The regional TOD policy will continue to recognize the need to attract transit patrons through feeder bus service and parking for auto commuters in some locations, but will place a new regional emphasis on attracting transit riders by increasing the opportunities for people to live and work within an easy walk of a transit station or bus corridor.



## V. CRITERIA FOR DEVELOPING THE TOD POLICY

In addition to the policy principles outlined above, the review of TOD policies in other regions offers a set of criteria for creating a TOD policy relevant to the conditions in the Bay Area:

Maintain Flexibility and Local Control: The regional TOD policy should set performance measures in a manner that meets its own ridership, livability, and cost effectiveness goals, yet allows local jurisdictions the flexibility to address land use issues in their own way.

Don't Create a Burdensome System: The effort local jurisdictions must undertake to comply with the regional TOD policy should nest inside current processes and link with existing programs by local transit agencies (e.g. BART and VTA).

Tie Expectations to Reality: Benchmarks for performance (planning, regulation and development) should be tied to what local governments (and the market) can realistically provide at different stages in the process.

Reward Excellence: Simply setting a pass/fail requirement tends to deliver the lowest common denominator. A performance-based system should reward excellence and be understandable by the public throughout the region.

Think About the Long Term: Politics and markets change over time. While the policy needs to be sensitive to change, expectations for performance ought to be evaluated once the transportation investment is made.

Focus on Measurable Impacts: The regional TOD policy should focus on the most important variables that link land use to cost effective transit demand and provide incentives and support for communities to deliver the placemaking elements of TOD.

## VI. PROPOSED REGIONAL TOD POLICY

### A. POLICY FRAMEWORK

In order to respond to the wide variety of physical and market conditions in the region and to align the policy framework with common planning efforts by local jurisdictions, it is recommended that the regional TOD policy be applied at three scales:

**(1) Transit Corridor**: Data and policies would be required consistent with the level of detail typically included in a local General Plan.

**(2) Station Area**: Site specific plans, policies, regulations and implementation mechanisms would be required through the development of Station Area Plans.



**(3) Final Plan:** The regulatory and financing mechanisms for implementing the Station Area Plan would be in place consistent with the strategy outlined in the Station Area Plans.

These three scales represent both a level of detail and a time factor, with increasing detail required as a project moves closer toward implementation and certainty.

## **B. PROPOSED CORRIDOR PERFORMANCE MEASURES**

Three options for evaluating performance at the Corridor scale are presented below. These options are presented as alternative approaches to achieving the goals of the regional TOD policy. Ultimately, one option will be selected and incorporated into the amendment of Resolution 3434. The three options are:

**Option 1:** Performance measure based on the level of walk access to transit stations

**Option 2:** Performance measure based on level of residential population around transit stations and the linkage to regional employment centers.

**Option 3:** Combined performance measure that translates local efforts to concentrate housing and jobs near transit and adopt supportive design policies into a point system.

In all cases it is envisioned that the performance measures would be applied to the entire corridor, and averaged across the different stations to determine a corridor-wide measure of performance. In other words, each station along the corridor would not have to meet the performance measures as defined, but the corridor itself on average must be able to meet the thresholds.

It is also envisioned that a Corridor Working Group involving regional agencies, the county congestion management agency, the transit agency(s), local jurisdictions, and private sector interests, would be needed to determine station-by-station targets such that the corridor as a whole would meet the performance measure.

The following table provides a summary of the three corridor performance options. It is assumed that as the TOD study moves forward, elements of various options could be combined to make a preferred alternative.

SUMMARY OF CORRIDOR PERFORMANCE EVALUATION OPTIONS			
Performance Elements	Option 1 Access Mode	Option 2 Population and Job Access	Option 3 Point System
<b>Surrounding Land Uses</b>	Evaluated in Station Area Plan.	1) Measure of existing and future residents within 1/2 mile of all transit stations along corridor. Minimum threshold established based on type of transit – costlier investments have higher expectations. 2) Rating for number of job centers on or within 1/2 mile of transit stations.	More points for more intensive land uses within 1/2 mile of stations.
<b>Access Mode</b>	% Walk access to stations along corridor based on estimates. Minimum threshold established based on transit technology.	Evaluated in Station Area Plan	Points increase with % increase in walk access from station areas based on estimates provided by local governments.
<b>Street Connectivity</b>	High, Medium, Low rating that evaluates street connectivity to surrounding areas as shown on General Plan map.	Evaluated in Station Area Plan.	Points for extensive street connectivity to surrounding areas as shown on General Plan map.
<b>Urban Design</b>	Evaluated in Station Area Plan	Evaluated in Station Area Plan	Points for General Plan policies that support: <ul style="list-style-type: none"> <li>• Mixed-Use development in TOD areas</li> <li>• Small block sizes</li> <li>• Reduced parking, shared parking, parking behind buildings</li> <li>• Build-to-lines</li> </ul>

## Option 1: Walk Access to Stations

Traditionally, transit agencies have focused on estimating transit ridership as a key indicator of performance. Working from this foundation, this option - Walk Access to Stations – uses the number of transit patrons who walk to or from the transit station as a proxy for supportive local land use. The more people who live and work in close proximity to public transit, the more people who will walk to or from the station. This approach is based on a more traditional transportation performance measure, and also takes an initial step toward addressing surrounding land use patterns and the larger needs of communities for more vibrant station areas.

This option would ask communities along the proposed transit corridor to estimate the percentage of patrons walking to the transit stations based on an assessment of existing and future land use patterns. The estimates for individual stations would be averaged for the length of the corridor. The performance targets would vary based on the type of transit being considered.

Of course, other modes of access are critical to making transit investments work, including feeder bus, auto access and bicycle access. However, this approach focuses on the goal of maximizing the cost-effectiveness of the transit investment by boosting transit ridership while minimizing the additional costs of bringing riders to the stations.

<b>OPTION 1: WALK ACCESS PERFORMANCE MEASURES</b>					
	Rail Rapid Transit (BART)	Light Rail	Bus Rapid Transit/ Streetcar	Commuter Rail/Ferry	High Frequency Bus <sup>7</sup>
High					
Medium-High					
Medium					
Medium-Low					
Low					
% Walk Access Estimates measured as an average per station for the corridor.					

### Option 1 Advantage:

- Addresses the issue from a more traditional transportation perspective.

### Option 1 Disadvantages:

- Does not directly address land use patterns and policies at the corridor level, which are most highly correlated with transit ridership.

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<sup>7</sup> A note about technology: A supplement to this policy ought to define the terms we are using for the various transit technologies addressed by this policy.

- Does not address TOD supportive design, which also directly influences transit ridership, at the corridor level.
- May be hard to estimate, as methods for estimating the number of transit patrons that walk to stations are not widely available.

## **Option 2: Surrounding Residential Population and Access to Jobs**

Option 2 would establish a performance measure for residential population in the areas immediately around transit stations along a proposed corridor and a review of the proximity of residents to transit-served job centers. This approach is based on studies that conclude that people who live within a close walk of a transit station are far more likely to take transit and the ability of a transit line to draw commuters depends on the ability of employees to easily access major job centers via transit.

**This option would set threshold levels of population for a corridor under consideration, based on existing land use patterns and future land use plans.** How the residential population is distributed along the corridor, and how the population is distributed within the proximity of each station –e.g. by housing type and density– is up to local jurisdictions, and will be examined as part of the development of Station Area Plans described in more detail in the implementation process below.

### **Option 2 Advantages:**

- Focuses on the most influential contributor to transit ridership – the number of people who live in close proximity to transit stations – in a direct and straightforward manner that can be addressed directly by local jurisdictions.
- Considers the importance of linking residents to job centers along a transit corridor, with simple methods of analysis.
- Builds on analytical requirements and thresholds already in place for FTA and BART projects, and commonly used in local planning efforts.
- Relatively easy to understand.

### **Option 2 Disadvantages:**

- Does not address TOD supportive design at the corridor level, which also directly influences transit ridership and the vitality of the station area (note: these are addressed on a station by station basis through the development of Station Area Plans).
- Requires common agreement on the definition of job centers.

<b>OPTION 2: PART A RESIDENTIAL POPULATION PERFORMANCE MEASURE</b>					
	Rail Rapid Transit (BART)	Light Rail	Bus Rapid Transit/ Streetcar	Commuter Rail/Ferry	High Frequency Bus
High					
Medium-High					
Medium					
Medium-Low					
Low					
<i>Total Residential Population Existing and Planned within 1/2 mile of station or residents per square mile. Targets shown are averages for all stations along a corridor.</i>					

<b>OPTION 2: PART B PROXIMITY TO JOB CENTERS</b>					
	Rail Rapid Transit (BART)	Light Rail	Bus Rapid Transit/ Streetcar	Commuter Rail/Ferry	High Frequency Bus
High					
Medium-High					
Medium					
Medium-Low					
Low					
<i>How many job centers of at least 50,000 employees within 1/2 mile of the stations in the corridor? A higher rating is achieved by a greater number of job centers.</i>					

### Option 3: Point System

The third option would combine a number of different approaches into an overall corridor rating based on a point system – it aims to incorporate both land use design policies that have a strong influence on transit ridership and station area vitality, along with residential density. This point system would, at a very preliminary level, reward both the level of development and the presence of policies that support TOD design features. This option is defined from an interest in a more comprehensive approach –since we know from the

studies and experience that TOD design and supportive policies have a significant impact on transit ridership and station area vitality.

A number of urban design policies have strong influences on transit ridership – including parking policies, street block size, well-designed walkways to transit stations, and locally serving retail. This option would require the development of a rating system to include these key land use design policies and residential density as defined above, and turn this into a point system. Given the diversity of the regional land uses and transit modes, it is envisioned that the development of such a rating system would involve staff members from the transit agencies, local jurisdictions, congestion management agencies, and other interested stakeholders, in addition to MTC.

#### Option 3 Advantages:

- Incorporates key factors of TOD supportive design more explicitly at the corridor level, which directly influence transit ridership and the vitality of station areas.
- Incorporates residential density – the most influential contributor to transit ridership.
- Includes multiple evaluation factors – which make the performance measure both more robust and more flexible.

#### Option 3 Disadvantages:

- Requires development of a new rating system which would likely require an extensive process working with transit and land use partners to define the criteria and appropriate ratings.
- Complex - may be difficult to capture key variables, and may be difficult to validate the ratings.
- Difficult to explain or to administer.

OPTION 3: POINT SYSTEM					
	Rail Rapid Transit (BART)	Light Rail	Bus Rapid Transit/ Streetcar	Commuter Rail/Ferry	High Frequency Bus
High					
Medium-High					
Medium					
Medium-Low					
Low					
<i>Points would be allocated based on a composite of factors: population density around stations, estimated walk access to stations, presence of general plan policies that call for interconnected street networks and pedestrian-oriented design elements.</i>					

These differing approaches were discussed at MTC's Transportation-Land Use Task Force and many of the issues identified with each option were discussed. As the consultant has worked with MTC staff to further develop these policy options, we have come to the tentative conclusion that Option 2 may be implemented most easily and effectively. Issues such as street connectivity, urban design and access mode are closely related to community design, and are better dealt with through a planning and implementation process that engages the project sponsor, local jurisdictions and the private sector. If desired, an added effort to review the presence of supportive General Plan policies could be added at the corridor scale. Furthermore, the research clearly suggests that density of residents and employees is the most important variable for predicting ridership, with transit accessibility and service quality a close second. Both of these can be dealt with through a process that relates number of residents and employees to the type of transit service to be supplied, as Option 2 does. Option 2 is also entirely consistent with existing MTC policy for Resolution 3434 projects.

The consultant accordingly suggests that MTC staff and Committees take further suggestions on these options, but presume that Option 2 is preferred, and set forth and provide funding for a planning and implementation process that deals with land use and design issues concurrent with the project development process.

### **C. PROPOSED STATION AREA PERFORMANCE MEASURES**

As part of the implementation of the regional TOD policy, it is suggested that each proposed transit project seeking funding through Resolution 3434 must develop a Station Area Plan for each proposed station. Planning efforts that would satisfy such a requirement may already be in place in some locations, and would be used to satisfy this requirement. Station Area Plans should, at a minimum, include the following elements:

- Existing and planned land uses;
- Market assessment of the timing and viability of various proposed land uses;
- Transit ridership estimates and estimates of patrons walking from the station area to the station itself;
- Station access and circulation plans for motorized, non-motorized and transit access;
- Urban Design standards, such as block size, "build to" lines, streetscape and sidewalk standards, specifically those that will promote the livability and walkability of the station area;
- TOD-related parking standards for each land use, along with provision for shared and priced parking, if any;



- Financial element: identification of public infrastructure required and financial plan for funding it, including needed tools such as tax increment financing, parking revenues or parking districts and assessment districts
- Implementation plan for the Station Area Plan that addresses how development proposals should be evaluated based on their consistency with the Station Area Plan.
- Definition of a process for how the local jurisdiction will deal with project proposals that do not meet or contribute to the standards, criteria and expectations established in the local Station Area Plans.

As part of the implementation of the Transportation and Land Use Policy Platform, MTC is in the process of developing a Station Area Planning Program as part of its overall TLC funding. Grants awarded under this program will assist local governments and transit agencies in the development of Station Area Plans and will be directly linked to the station area performance measures outlined above.

#### **D. PROPOSED FINAL PLAN PERFORMANCE MEASURES**

Once a Station Area Plan has been completed it is possible that there will be a time lag between the approval of the plan and adoption of the various regulatory and financing mechanisms that are needed to implement the Station Area Plans. However, if transit funding commitments are to be made based on the suggestions of the Station Area Plans, then a final round of review is appropriate to determine if the zoning, land assembly, street design, financing programs, and other agreements between the various stakeholders have indeed been put in place to deliver the proposed land use patterns.

This final review would entail a simple checklist tailored to the specifics of the various proposed elements. It would necessarily also include a process for working with projects that do not meet the standards, criteria and expectations established in the local Station Area Plans so that they might succeed.

#### **VII. PROPOSED IMPLEMENTATION PROCESS**

In order to implement this policy, several questions need to be answered:

- What is the process for evaluating the corridor level and station area performance measures?
- At what specific points will the performance measures be evaluated?
- Will the performance measures be based solely on what's planned for, or does some level of on the ground development need to be in place?

*What is the process for evaluating the corridor level and station area performance measures?*

A continuing level of cooperation between MTC, ABAG, the congestion management agencies (CMAs), the transit operator sponsoring the extension and the cities responsible for land use along the corridor will be essential. It will be necessary for these agencies to work together at various stages of project implementation through the Corridor Working Groups. More concrete TOD strategies and actions would be developed as the project planning and design effort gets more advanced.

*At what specific points will the performance measures be evaluated?*

Given the complexity of the land use planning and transit project development processes, and the number of transit projects included in Resolution 3434, MTC should define a limited number of specific steps for a performance review. In order to coordinate with these existing policies,<sup>8</sup> MTC could establish a three-step process of evaluating local land use policies that aligns with certification of the Alternatives Analysis/DEIS, timing for regional funding of the preliminary engineering and for final design/construction. At each stage, projects would be evaluated and given a rating. For example, MTC could use a minimum standard of "Medium-low" rating to advance from the DEIS into preliminary engineering (PE), a "Medium" rating to advance into Final Design and a "Medium" rating to advance into the construction phase.

*Will the performance measures be based solely on what's planned for, or does some level of on the ground development need to be in place?*

In order to balance the certainty of existing land uses with the interest in providing incentives for additional supportive development, MTC should ask a proposed corridor to demonstrate that it can meet at least half of the performance measure through development that is either permitted or built at the time of the second review effort.

The table on the following page outlines the measures that would apply to each of the conceptual alternatives. Clearly, the transit operator and city/county actions must be collaborative and iterative for them to work, so this schematic approach presumes a continuing corridor working group that includes the relevant local actors and transportation agencies, and presumes a continuing role for MTC, ABAG and the CMAs in helping to facilitate these efforts.

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<sup>8</sup> The policies of other agencies have been examined as part of this study to inform more policy development. BART evaluates and rates current local land uses around proposed transit extensions, and then follows up with projected transit ridership based on future land uses and other factors. The Federal Transit Administration (FTA) evaluates and rates local land uses twice in the New Starts process – once before preliminary engineering, and once before final design. FTA recommends a minimum level of "Medium-low" rating to advance into preliminary engineering (PE) and a "Medium" rating to advance into the construction phase. However, it is likely that FTA will revise its land use criteria in the future to both include an earlier review of existing and proposed land use in order to establish a stronger foundation for integrating land use and transportation plans.

<b>IMPLEMENTATION PROCESS</b> <b>TRANSIT PROJECT STAGES, TOD ACTIONS AND APPLICATION OF THE TOD POLICY</b>			
<b>Project Stage</b>	<b>Transit Operator Action</b>	<b>City Action</b>	<b>Regional Agencies/CMA Action</b>
<b>Alternatives Analysis/DEIS</b>	<ul style="list-style-type: none"> <li>• Join Corridor Working Group</li> <li>• Forecast and identify land use/ridership scenarios</li> </ul>	<ul style="list-style-type: none"> <li>• Join Corridor Working Group</li> <li>• Review general plan forecasts</li> <li>• Conduct Initial Station Area Assessments</li> <li>• Revise general plan policies and map</li> </ul>	<ul style="list-style-type: none"> <li>• Form Corridor Working Group</li> <li>• Review project Apply criteria</li> <li>• Initial Corridor Performance Evaluation</li> <li>• Provide funding for corridor planning (T-Plus)</li> </ul>
<i>Potential threshold: For transit project to proceed, corridor must meet at least “low-medium” rating for corridor performance measures to advance into Preliminary Engineering. If performance measure is not met, transit project is considered “not ready to move forward” until plans are in place to meet threshold.</i>			
<b>Preliminary Engineering</b>	<ul style="list-style-type: none"> <li>• Prepare land assembly strategy</li> <li>• Prepare access priority Plan</li> <li>• Enter into MOUs with Local Governments</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct Station Area Plans</li> <li>• Establish interim TOD zoning</li> </ul>	<ul style="list-style-type: none"> <li>• Coordinate and provide funding for Station Area Plans</li> </ul>
<i>Potential threshold: For transit project to proceed, (1) corridor must meet at least “medium” rating for corridor performance measures to advance into Final Design phase; (2) Station Area Plans must be completed and adopted. If performance measure is not met and station area plans are not complete, transit project is considered “not ready to move forward” until plans are in place to meet threshold.</i>			
<b>Final Design/ ROW</b>	<ul style="list-style-type: none"> <li>• Execute land assembly program</li> <li>• Initiate Joint development strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Adopt TOD Zoning Ordinances</li> <li>• Execute land assembly program</li> <li>• ID financing tools and institutional arrangements</li> </ul>	<ul style="list-style-type: none"> <li>• Approve Station Area Plans</li> <li>• TLC planning and capital funding</li> </ul>

*Potential threshold: For transit project to proceed, (1) corridor must meet at least “medium” rating for corridor performance measures to advance into construction phase; (2) Implementation mechanisms must be in place as outlined in the adopted Station Area Plans. If performance measure is not met and implementation mechanisms are not complete, transit project is considered “not ready to move forward” until plans are in place to meet threshold.*

<b>Construction</b>	<ul style="list-style-type: none"> <li>• Issue Joint Development RFPs</li> </ul>	<ul style="list-style-type: none"> <li>• Implement financing tools.</li> <li>• Enter into intergovernmental agreements or MOUs.</li> <li>• Solicit for Development</li> </ul>	<ul style="list-style-type: none"> <li>• Provide Transportation for Livable Communities Capital funding</li> <li>• Housing Incentives Program funding</li> </ul>
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## VIII. NEXT STEPS FOR THE REGIONAL TOD POLICY

This paper is intended to lay out a policy proposal for strengthening the regional commitment to transit-oriented development, specifically by:

- (1) Proposing options for refining MTC's existing land use performance measures for transit expansion projects funded under Resolution 3434;
- (2) Proposing an implementation process for this policy that defines expectations, timelines, roles and responsibilities for all the various public agencies involved; and
- (3) Defining additional financial resources and incentives that can assist local governments in planning for transit-oriented developments and completing Station Area Plans.

This policy proposal will be distributed for public comment. MTC and its partners will conduct targeted outreach to transit agencies, local elected officials, public interest stakeholders, developers and builders, business interests and city staff to receive additional feedback on the proposals. During this outreach period, MTC will also be conducting a series of case studies to test how the proposed TOD policy would be applied and the degree to which it would be effective in meeting the proposed goals.

MTC's Transportation-Land Use Task Force, the MTC-ABAG Joint Policy Committee, MTC's Planning and Operations Committee, and ABAG's Regional Planning Committee will all vet this policy proposal. A final policy will be amended into Resolution 3434 as part of a larger update in the summer of 2005.

## APPENDIX A: PRELIMINARY CORRIDOR PERFORMANCE MEASURES FOR OPTION 2

The Center for Transit-Oriented Development team used the following sources for recommending appropriate thresholds for population densities along proposed transit corridors:

- The CTOD's National TOD Database – Exemplary TODs in both the Bay Area and nationally were benchmarked for a variety of performance factors, including population per square mile.
- The Federal Transit Administration's New Starts Guidelines – Information gathered for the Task 2 report indicated the amount of development necessary for proposed projects to pass the New Starts evaluation criteria.
- BART's System Expansion Policy – This policy establishes targets for ridership at stations along new extensions of the BART system;
- The MTC/ABAG GIS Database of Transit Planning Areas – Population and employment densities were analyzed for both the year 2000 and Projections '03 estimates for the Resolution 3434 corridors; and
- TOD Literature – Key research on the relationship between densities and transit ridership were analyzed to establish baseline performance thresholds.

The table below shows the CTOD's recommended set of population density measures for different types of transit service in the Bay Area. These recommendations are preliminary and will be tested and refined during the case study portion of the TOD study (Task 6).

<b>OPTION 1: AVERAGE POPULATION PER SQUARE MILE RESIDENTIAL ONLY</b>				
	Rail Rapid Transit (BART)	Light Rail	Bus Rapid Transit	Commuter Rail/Ferry
Option 1A* Population Per Square Mile	17,000	14,000	12,000	10,000
Option 1B** Population Per Square Mile	12,000	10,000	8,000	7,000
<i>Population per square mile is an average based on existing and planned residential population within a half mile of all new stations.</i>				

\* Bracketed between Projections '03 and Smart Growth Vision, (BART target is analogous to Rosslyn-Ballston Corridor population densities)

\*\*Bracketed between Existing and Projections '03. Considers BART Extensions/FTA New Starts Criteria. (BART target is close to Fruitvale & No. Berkeley, Evanston, IL)

The following table was prepared at the request of MTC staff to indicate an appropriate set of combined residential and employment density thresholds for different types of transit in the Bay Area. These numerical ranges were derived from the same sources listed above.

<b>OPTION 2: AVERAGE POPULATION PER SQUARE MILE RESIDENTIAL PLUS EMPLOYMENT</b>				
	Rail Rapid Transit (BART)	Light Rail	Bus Rapid Transit	Commuter Rail/Ferry
Option 2A* Population + Jobs Per Square Mile	35,000	25,000	20,000	17,000
Option 2B** Population + Jobs Per Square Mile	25,000	22,000	18,000	15,000
<i>Population per square mile is an average based on existing and planned residential and employment population within a half mile of all new stations.</i>				

\* Bracketed between Projections '03 and Smart Growth Vision,

\*\*Bracketed between Existing and Projections '03.